IN THE CLAIMS

Kindly delete claims 12-27 and 29 without prejudice to, or disclaimer of, the subject matter therein. The following is a complete listing of revised claims with a status identifier in parenthesis.

LISTING OF CLAIMS

1. (Previously Presented) A method for acquiring operating parameters in a communications system operable to transmit a data signal, the method comprising the steps of:

generating at least one operating parameter carrier having a frequency value in a vicinity of a null, associated with a data rate bit period, of a data spectrum of the data signal;

modulating the at least one operating parameter carrier;

summing the operation parameter carrier with the data signal;

transmitting the summed signal; and

recovering the at least one operating parameter carrier from the summed signal.

2. (Original) The method of claim 1 wherein the generating step generates at least another operating parameter carrier having another frequency value in the vicinity of the null of the data spectrum.

3. (Original) The method of claim 1 wherein the communications system comprises at least one optical channel.

4. (Original) The method of claim 1 wherein the at least one operating parameter carrier is a sinusoid.

5. (Original) The method of claim 1 wherein the data spectrum of the data signal comprises a plurality of nulls, the method comprising the further steps of:

generating at least another operating parameter carrier having a frequency value in another of the plurality of nulls; and

summing the another operating parameter carrier with the data signal,

wherein the recovering step recovers the another operating parameter carrier.

6. (Original) The method of claim 5 wherein the communications system comprises a wavelength division multiplexed communications system.

7. (Original) The method of claim 6 wherein the data spectrum is an RZ spectrum.

8. (Original) The method of claim 6 wherein the data spectrum is an NRZ spectrum.

9. (Original) The method of claim 8 wherein the demodulating step includes the further steps of:

transmitting RZ format data; and

recovering NRZ format data from the RZ format data.

10. (Original) The method of claim 1 further comprising the step of bandwidth limiting the at least one operating parameter carrier.

11. (Original) The method of claim 1 wherein the demodulating step further includes the step of bandwidth filtering the summed signal.

12. (Cancelled).

13. (Cancelled)

14. (Cancelled).

15. (Cancelled).

16. (Cancelled).

17. (Cancelled).

18. (Cancelled).

19. (Cancelled).

20. (Cancelled).

21. (Cancelled).

22. (Cancelled).

23. (Cancelled).

24. (Cancelled).

25. (Cancelled).

26. (Cancelled).

27. (Cancelled).

28. (Previously Presented) A method for optical channel operating parameter acquisition in a communications system operable to transmit an NRZ data signal, comprising the steps of:

determining a spectrum for the NRZ data;

generating a first sinusoidal operating parameter carrier having a frequency at a first null, associated with a data rate bit period, in the spectrum and a second sinusoidal operating parameter carrier having a frequency at a second null, associated with the data rate bit period, in the spectrum, the second null being successive to the first null in the spectrum;

modulating the operating parameter carriers using NRZ operating parameter data, including;

representing the NRZ operating parameter data in an RZ format;

modulating the first carrier with the RZ formatted data; and

modulating the second carrier with the RZ formatted data;

summing the first operating parameter carrier, the second operating parameter carrier and the NRZ data signal;

transmitting the summed signal; and

at a receiver, recovering the operating parameter carriers from the summed signal by processing the RZ formatted data to provide NRZ operating parameter data.

29. (Cancelled).